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Customer No.: 31561
Docket No.: 7558-US-PA
Application No.: 10/064,916

REMARKS

Present Status of the Application

Upon entry of the amendments in this response, claims 1-18 are pending of which claims 1-8, and 10-17 have been amended, and claims 9 and 18 have been cancelled, without prejudice or disclaimer in order to more explicitly describe the claimed invention. It is believed that no new matter is added by way of amendments made to the claims and specification. For at least the foregoing reason, applicants respectfully submit that claims 1-17 patently define over prior art of record and reconsideration of this application is respectfully requested.

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Discussion for objection to claims due to informalities***1. Claims 1-18 are objected to because of the following informalities***

In response thereto, applicants appreciate the examiner's point out the claims' informalities and thus amended all informalities present in claims 1-18, except claims 9 and 18, as instructed by the examiner. Moreover, the amended claims 1-8, and 10-17 are believed to have no informalities. In addition, applicants would like to point out we didn't err in using the terms "the first memory device" and "the second memory device" in claim 3-8 because the "the first memory device" and "the second memory device" refer to different types of non-volatile memory. Moreover, claims 9 and 18 are actually meaningless so that they were cancelled.

Discussion for objection to claims under 35 U.S.C. 112 2nd Paragraph

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Claims 6-18 are rejected under 35 U.S.C. 112, 2nd Paragraph, as being indefinite for failing to particularly pointing out and distinctly claim the subject matter which applicant regards as the invention.

In response thereto, applicants found the claims 6 and 7, as well as their counterparts depending on the claim 10, claims 15 and 16, had been described so improperly that the examiner couldn't figure out what subject matter they claimed. Therefore, the claims 6-7 and 15-16 were so amended that they clearly and definitely claim the subject matter which applicant regards as the invention.

Furthermore, the examiner alleged that the phrase of "compatible with pin configuration" in the independent claim 10 is vague. Therefore, the claim 10 was amended to replace this phrase with "the multi-memory architecture has the same overall pin configuration as the first type non-volatile memory device" as disclosed in the amended claim 10.

Discussion for objection to claims under 35 U.S.C.102 (e)

9. Claims 1-3 and 10-12 are rejected under 35 U.S.C.102 (e) as being anticipated by Ayukawa et al. (U.S. Patent 6,411,561)

In response thereto, applicants respectfully traverse the preceding rejections based on the following arguments and thus withdrawal of rejections to the claims 1-3 and 10-12 is respectfully requested. First of all, from the abstract, Ayukawa only discloses a multi-chip architecture comprises at least two memory chips and thus acquires functionalities of a large storage capacity

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and a reduced data retention current. In contrast, invention motives and achieved functionalities of the present invention are not only to acquire a larger data storage capacity but to eliminate the need for redesigning a new pin layout scheme on the PCB, as disclosed in the first paragraph in the "SUMMARY OF THE INVENTION." As a result, invention motives of the present invention are distinct from those of Ayukawa

In addition, to establish a prima facie case of anticipation, Ayukawa must teach all limitations of the amended independent claims 1 and 10. Actually, Ayukawa fails to teach, suggest or disclose "the total pin number of the multi-memory architecture is equal to the number of pins of the first type non-volatile memory device of multi-memory architecture having the total memory capacity" as claimed in the amended claim 1. Also, Ayukawa fails to teach, suggest or disclose "the multi-memory architecture has the same overall pin configuration as the first type non-volatile memory device" as claimed in the amended claim 10. Hence, Ayukawa can not render the amended claims 1 and 10 "anticipated" due to its failure to meet the requirement for establishing a prima facie case of anticipation. That is, the amended claims 1 and 10 are patentable over Ayukawa under 35 U.S.C.102 (e).

Regarding the amended dependent claim 2, no matter whether it is conventional, it is patentable as a matter of law for at least the reason that it contains the feature of "the total pin number of the multi-memory architecture is equal to the number of pins of the first type non-volatile memory device of multi-memory architecture having the total memory capacity," as disclosed in its base amended claim 1.

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Regarding the amended claim 3, the examiner alleged that the SRAM shows or overlaps (i.e. "replace") in the address space of the DRAM (see figures 3a and 3b). However, in Ayukawa, the segments in DRAM are partitioned into one group of shadows and the other group of 32 Mb (i.e. segments), in which only shadows are replaced by an external SRAM. In contrast, the memory of the present invention is only partitioned into segments, instead of shadows and segments in Ayukawa, and further the segments, not the shadows in Ayukawa, are replaced by the external memory. Therefore, the amended claim 3 is not anticipated by Ayukawa.

As to claims 6-9 and 13-18, the examiner alleged that no prior art has been applied to them because they are so vague that he(or she) can't figure out what subject matter the applicants regards as the invention. In this regard, applicants found that Ayukawa fails to disclose all limitations disclosed in the amended claims 4-8 and 13-17, each of which is believed to particularly pointing out and distinctly claim the subject matter which applicant regards as the invention.

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CONCLUSION

For at least the foregoing reasons, it is believed that all the pending claims 1-17 of the present application patently define over the prior art and are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,

Date :

July 7, 2005

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